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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/539,500	03/30/2000	Brian Philip Mathews	30566.80USU1	8400

22462 7590 01/12/2004

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EXAMINER

GARCIA OTERO, EDUARDO

ART UNIT	PAPER NUMBER
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2123

DATE MAILED: 01/12/2004

7

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/539,500

Applicant(s)

MATHEWS ET AL.

Examiner

Eduardo Garcia-Otero

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 December 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION: Final Action**

***Introduction***

1. Title is: METHOD AND APPARATUS FOR PROVIDING ACCESS TO DRAWING INFORMATION.
2. First named inventor is: MATHEW.
3. Priority is claimed to US Provisional Application 60/132,057 filed 30 April 1999.
4. Applicant's Amendment and Information Disclosure Statement, were received 12/12/03, and amend claims 1, 2, 6, 7, and 12.
5. Claims 1-15 have been submitted, examined, and rejected.

***Index of Prior Art***

6. **Shumaker** refers to "AutoCAD and its applications" by Terence M. Shumaker et. al., The Goodheart-Willcox Company, Inc., 1998, pages 267, 268, and 277, and page 347.
7. **Walker** refers to US Patent 6,057,929.
8. **Gluck** refers to US Patent 5,911,776.
9. **Bodin** refers to US Patent 6,604,106.
10. **Derfler** refers to "How Networks Work" by Derfler et. al., Fourth Edition, 1998, Que Corporation, ISBN: 0-7897-1595-3, page 119.

***Definitions***

11. **IEEE Dictionary** refers to The Authoritative Dictionary of IEEE Standards and Terms, Seventh Edition, by IEEE Press, ISBN 0-7381-2601-2, 2000.
12. IEEE Dictionary defines "**server**" as including "(3) In a network, a device or computer system that is dedicated to providing specific facilities to other devices to the network. *Contrast:* client. *See also:* mail server; disk server; file server; terminal server; network server; database server; print server."
13. IEEE Dictionary defines "**client**" as including "(3) In networking, a station or program requesting a service" and "(5) Refers to the software component on one device that uses the services provided by a server on another device".

***Applicant Remarks***

14. The Examiner appreciates the Information Disclosure Statement containing "AutoCAD Release 14 User's Guide" published 12/5/97.

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15. The prior action's 35 USC 112 rejections are withdrawn due to Applicant's amendments.
16. Regarding the 35 USC 103 rejections, Applicant raises several issues, and has amended the claims to emphasize these issues. Said issues focus on servers.
17. First, IEEE Dictionary defines "**server**" as including "(3) In a network, a device or computer system that is dedicated to providing specific facilities to other devices to the network. *Contrast*: client. *See also*: mail server; disk server; file server; terminal server; network server; database server; print server."
18. Second, Applicant asserts that Shumaker's standard AutoCAD program is a client based program that is not operated on a network, and asserts "No such server or server component is described, implicitly or explicitly by Shumaker". However, Shumaker's prior art must be interpreted in the context of Shumaker's Chapter 15 is titled "AutoCAD and the Internet" and includes the paragraph "**AutoCAD Release 14 now incorporates a set of tools called the Internet Utilities... Web Browser... you can now share drawing information with systems that do not have AutoCAD installed**" at page 347. Thus, Shumaker clearly discloses networks, and implicitly discloses network servers. Said page 347 is supplied to the Applicant with this action.
19. Third, Shumaker must be interpreted in the view of one of ordinary skill in the art.
20. Note that reasonable "inferences", and "common sense" may be considered in formulating rejections for obviousness. Specifically, *In re Preda*, 401 F.2d 825, 159 USPQ 342, 344 (CCPA 1968) states "in considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom." Also, *In re Bozek*, 416 F.2d 738, 163 USPQ 545, 549 (CCPA 1969) states that obviousness may be concluded from "common knowledge and common sense of the person of ordinary skill in the art without any specific hint or suggestion in a particular reference". Additionally, see *In re Gauerke*, 24 CCPA 725, 86 F.2d 330, 31 USPQ 330, 333 (CCPA 1936), and *In re Libby*, 45 CCPA 944, 255 F.2d 412, 118 USPQ 94, 96 (CCPA 1958), and *In re Jacoby*, 309 F.2d 738, 125 USPQ 317, 319 (CCPA 1962), and *In re Wiggins*, 488 F.2d 538, 543, 1979 USPQ 421, 424 (CCPA 1973).

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21. Thus, one of ordinary skill in the art would interpret Shumaker's AutoCAD as capable of being a stand-alone program isolated in a single computer, and also as capable of being a "specific facility" (using IEEE terminology) in a server, and serving clients. S
22. Fourth, similarly, the other cited prior art (Walker etc.) should also be interpreted (in view of one of ordinary skill in the art) as disclosing its functions as capable of being implemented as a "specific facility" in a server. Note that reasonable "inferences", and "common sense" may be considered in formulating rejections for obviousness, as discussed above.
23. The Applicant has not asserted that Shumaker or Walker have any specific characteristics which would make them difficult to implement as "special facility" on a server.
24. Fifth, the 35 USC 103 rejections have been amended in view of the claim amendments. Claim 1 (amended) now explicitly claims "a server". In order to clarify the rejection, the Examiner introduces additional art (Derfler) that expressly discusses servers and their advantages.

#### *Claim Interpretation*

25. Claim 1 (amended), the preamble term "**computer implemented system**" is interpreted as a "**machine**", per the statutory classes of 35 USC 101. See MPEP 2106 regarding software. The limitations of claim 1 (amended) are interpreted as machine elements.

#### *35 USC § 103*

26. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action: (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
27. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows: Determining the scope and contents of the prior art. Ascertaining the differences between the prior art and the claims at issue. Resolving the level of ordinary skill in the pertinent art. Considering objective evidence present in the application indicating obviousness or nonobviousness.
28. **Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable.**

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29. Claim 1 (amended) is rejected under 35 U.S.C. 103(a) as being unpatentable over Shumaker in view of Walker and Derfler.
30. Claim 1 (amended) is an independent “computer implemented system” claim with 5 limitations, labeled by the Examiner for convenience.
31. [1] **“a drawing file”** is disclosed at Shumaker page 267 “AutoCAD drawing files are composed of vectors. A raster file defines objects by the location and color of the screen pixels. Rasterfiles are usually called bitmaps... You can work with raster files using the Image dialog box. Some of the most common raster files used in industry today are the followint: .GIF (Graphics Interchange Format)... .PCX (Personal Computer Exchanged)... .TIF (Tagged Image File Format)... .BMP ... .PCT ... .JPG ... .FLD or .FLI”, and at page 277 “A vector file contains objects defined by XYZ coordinates. Auto CAD allows you to work with several different vector files using the Export Data and Import File dialog boxes. The most common is the AutoCAD drawing file (.dwg). Other vector file types are .dxf, .3ds, .wmf, and .sat”.
32. [2] **“an information extraction server component configured to provide information relating to the drawing file from a group of information comprising file size, date, and author”** is disclosed at Schumaker page 268 Figure 13-2, particularly the button labeled “Details”, and the description “Pick to view information about the image”.
33. [3] **“a search server component configured to provide a query engine that allows queries of the drawing file”** is disclosed at Schumaker page 268 Figure 13-2, particularly the button labeled “Details”, and the description “Pick to view information about the image”.
34. Shumaker does not expressly disclose the remaining limitations.
35. [4] **“a conversion server component configured to transform the drawing file from one drawing file format to another drawing file format without accessing the application that created the drawing file”** is disclosed at Walker at column 3 lines 46-62, “The file format of the drawing file 17 and the image characteristic data file 18 vary according to, and are determined by, the architect's drafting software and the printer system that generates the prints. To provide greater uniformity, the present invention initially converts the drawing file to a neutral data file format, as indicated by step 12, in FIG. 2. In the preferred embodiment, the neutral data file is created using the Page Masters Apprentice Software Program,

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although several other commercially available programs could be used to create a neutral data file. Accordingly, the system converts the drawing file format to the Page Masters Apprentice file format. Page Masters Apprentice files are denoted by a VIC file extension. While the .VIC extension is used on the preferred embodiment, the extension is arbitrary and may be easily changed, for example, .AEC could be used. The conversion of the drawing file to the neutral format is transparent to the reprographer.”

36. [5] “a **server** comprising the information extraction server component, the search server component, and the conversion server component, wherein the server is configured to provide the information, query results, and the transformed drawing file across a network to a user using the graphical interface of a web browser” is disclosed by Derfler page 119 “four types of servers... One network strategy relies on a single powerful computer that is dedicated to providing all server functions for dozens or even hundreds of client computers on the network. This is known as *server-based networking*.”
37. **At the time** the invention was made, it would have been obvious to a person of ordinary skill in the art to use Walker to modify Shumaker. One of ordinary skill in the art would have been motivated to do this “To provide greater uniformity” according to Walker column 3 line 49, and to implement Shumaker’s page 347 “Internet” capabilities using Derfler’s servers. Note that Shumaker’s “Internet” capabilities are designed to “share drawing information with systems that do not have AutoCAD installed”, thus implicitly teaching towards loading a single version of AutoCAD on Derfler’s page 119 “application server”, and thus supporting other systems that do not have AutoCAD installed. Derfler page 119 states “as you install more client computers that share the server’s resources, a server-based network becomes more economical.”
38. Claim 2 (amended) is rejected under 35 U.S.C. 103(a) as being unpatentable over Shumaker in view of Walker and Derfler and Bodin.
39. Claim 2 (amended) depends from Claim 1 (amended), with 1 additional limitation.
40. Shumaker does not expressly disclose the remaining limitation.
41. **“an active server page (ASP) that interacts with one or more of the server components to obtain requested information in the graphical user interface on the web browser”** is disclosed Bodin at column 3 lines 36-47, “A representative Web server 12 is an IBM

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Netfinity server comprising a RISC-based processor 18, the AIX.RTM. operating system 20 and a Web server program 22, such as Netscape Enterprise Server. The server 12 also includes a display 24 supporting a graphical user interface (GUI) for management and administration, and an Application Programming Interface (API) 23 that provides extensions to enable application developers to extend and/or customize the core functionality thereof through software programs including Common Gateway Interface (CGI) programs, plug-ins, servlets, active server pages, server side include (SSI) functions or the like.”

42. **At the time** the invention was made, it would have been obvious to a person of ordinary skill in the art to use Walker and Derfler and Bodin to modify Shumaker. One of ordinary skill in the art would have been motivated to do this “To provide greater uniformity” according to Walker column 3 line 49, and to manage and administrate files inexpensively and quickly over the internet and “improving the manner in which such content is served in response to client requests” according to Bodin column 1 line 11. Note that Shumaker’s “Internet” capabilities are designed to “share drawing information with systems that do not have AutoCAD installed”, thus implicitly teaching towards loading a single version of AutoCAD on Derfler’s page 119 “application server”, and thus supporting other systems that do not have AutoCAD installed. Derfler page 119 states “as you install more client computers that share the server’s resources, a server-based network becomes more economical.”
43. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shumaker in view of Walker and Derfler and Bodin.
44. Claim 3 depends from Claim 1 (amended), with 1 additional limitation.
45. Shumaker does not expressly disclose the remaining limitation.
46. **“the conversion component is cached”** is disclosed by Bodin at column 6 line 62 “cache”.
47. **At the time** the invention was made, it would have been obvious to a person of ordinary skill in the art to use Walker and Derfler and Bodin to modify Shumaker. One of ordinary skill in the art would have been motivated to do this “To provide greater uniformity” according to Walker column 3 line 49, and to cache frequently used data or instructions in order to speed the processing of data. Note that Shumaker’s “Internet” capabilities are designed to “share drawing information with systems that do not have AutoCAD installed”, thus implicitly teaching towards loading a single version of AutoCAD on Derfler’s page 119 “application



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server”, and thus supporting other systems that do not have AutoCAD installed. Derfler page 119 states “as you install more client computers that share the server’s resources, a server-based network becomes more economical.”

48. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shumaker in view of Walker and Derfler and Guck.

49. Claim 4 depends from Claim 1, with 1 additional limitation.

50. Shumaker does not expressly disclose the remaining limitation.

51. **“search server component utilizes an index server that interacts with one or more drawing filters to filter and retrieve information”** is disclosed by Guck at column 4 line 7-16, “The server module... provides a database repository for all documents, together with the ability to index and search the documents with a powerful search engine”.

52. **At the time** the invention was made, it would have been obvious to a person of ordinary skill in the art to use Walker and Derfler and Guck to modify Shumaker. One of ordinary skill in the art would have been motivated to do this “To provide greater uniformity” according to Walker column 3 line 49, and to efficiently manage the database files and their related information. Note that Shumaker’s “Internet” capabilities are designed to “share drawing information with systems that do not have AutoCAD installed”, thus implicitly teaching towards loading a single version of AutoCAD on Derfler’s page 119 “application server”, and thus supporting other systems that do not have AutoCAD installed. Derfler page 119 states “as you install more client computers that share the server’s resources, a server-based network becomes more economical.”

53. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shumaker in view of Walker and Derfler.

54. Claim 5 depends from Claim 1, with 1 additional limitation.

55. **“the drawing file is stored in DWG file format”** is disclosed by Shumaker at page 277 “A vector file contains objects defined by XYZ coordinates. Auto CAD allows you to work with several different vector files using the Export Data and Import File dialog boxes. The most common is the AutoCAD drawing file (.dwg). Other vector file types are .dxf, .3ds, .wmf, and .sat”.

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56. **At the time** the invention was made, it would have been obvious to a person of ordinary skill in the art to use Walker and Derfler to modify Shumaker. One of ordinary skill in the art would have been motivated to do this “To provide greater uniformity” according to Walker column 3 line 49. Note that Shumaker’s “Internet” capabilities are designed to “share drawing information with systems that do not have AutoCAD installed”, thus implicitly teaching towards loading a single version of AutoCAD on Derfler’s page 119 “application server”, and thus supporting other systems that do not have AutoCAD installed. Derfler page 119 states “as you install more client computers that share the server’s resources, a server-based network becomes more economical.”
57. Claim 6 (amended) is rejected under 35 U.S.C. 103(a) as being unpatentable over Shumaker in view of Walker and Derfler.
58. Claim 6 (amended) is an independent “method” claim with 3 limitations, labeled for convenience. Note that the limitation of claim 6 are very similar to the limitations of claim 1, except that claim 6 does not claim “a drawing file” as a separate limitation.
59. [1] **“obtaining information relating to the drawing file from a group of information comprising file size, date, and author”** is disclosed at Schumaker page 268 Figure 13-2, particularly the button labeled “Details”, and the description “Pick to view information about the image”.
60. [2] **“providing a query engine that allows queries of the drawing file”** is disclosed at Schumaker page 268 Figure 13-2, particularly the button labeled “Details”, and the description “Pick to view information about the image”.
61. Shumaker does not expressly disclose the remaining limitation.
62. [3] **“transforming the drawing file from one drawing file format to another drawing file format without accessing the application that created the drawing file”** is disclosed at Walker at column 3 lines 46-62, “The file format of the drawing file 17 and the image characteristic data file 18 vary according to, and are determined by, the architect’s drafting software and the printer system that generates the prints. To provide greater uniformity, the present invention initially converts the drawing file to a neutral data file format, as indicated by step 12, in FIG. 2. In the preferred embodiment, the neutral data file is created using the Page Masters Apprentice Software Program, although several other commercially available

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programs could be used to create a neutral data file. Accordingly, the system converts the drawing file format to the Page Masters Apprentice file format. Page Masters Apprentice files are denoted by a VIC file extension. While the .VIC extension is used on the preferred embodiment, the extension is arbitrary and may be easily changed, for example, .AEC could be used. The conversion of the drawing file to the neutral format is transparent to the reprographer.”

63. [4] **“providing the information, query results, and the transformed drawing file across a network** to a user using a graphical user interface of a web browser” is disclosed by Derfler page 119 “four types of servers... One network strategy relies on a single powerful computer that is dedicated to providing all server functions for dozens or even hundreds of client computers on the network. This is known as *server-based networking*.”
64. **At the time** the invention was made, it would have been obvious to a person of ordinary skill in the art to use Walker and Derfler to modify Shumaker. One of ordinary skill in the art would have been motivated to do this “To provide greater uniformity” according to Walker column 3 line 49. Note that Shumaker’s “Internet” capabilities are designed to “share drawing information with systems that do not have AutoCAD installed”, thus implicitly teaching towards loading a single version of AutoCAD on Derfler’s page 119 “application server”, and thus supporting other systems that do not have AutoCAD installed. Derfler page 119 states “as you install more client computers that share the server’s resources, a server-based network becomes more economical.”
65. Claims 7-10 present the same additional limitations as claims 2-5 respectively, and are rejected for the same reasons.
66. Claims 11-15 present “article of manufacture embodying logic for performing a method” claims with the same limitations as claims 6-10 respectively, and are rejected for the same reasons.

### ***Conclusion***

67. All claims stand rejected.

### **Response to Amendments or new IDS-FINAL OFFICE ACTION**

68. Applicant's amendments or new IDS necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a).

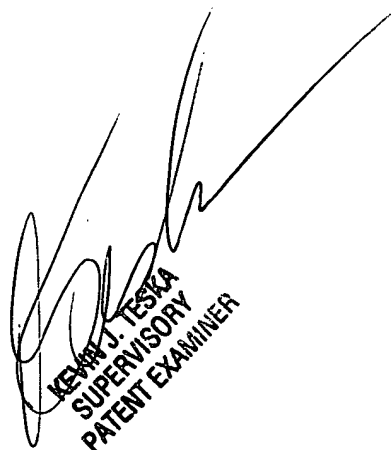
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Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

*Communication*

69. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Eduardo Garcia-Otero whose telephone number is 703-305-0857. The examiner can normally be reached on Tuesday through Friday from 9:00 AM to 7:00 PM. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Kevin Teska, can be reached at (703) 305-9704. The fax phone number for this group is 703-872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist, whose telephone number is (703) 305-3900.

\* \* \*



KEVIN J. TESKA  
SUPERVISORY  
PATENT EXAMINER